

the solution in Example 1, all the Fe^{2+} would be in complex with the EDTA. Therefore, photo-oxidation of the complex-forming substances is due to the photocatalytic activity of the newly formed complex and not to the photocatalytic action of free metal ions or metal salts in solution.

Moreover, no hydroxyl radicals are mentioned in CS '995; and even no other radicals are related to. Therefore a person skilled in the art would not understand from CS '995, that the degradation of the complex-forming substances is caused by the action of free radicals, and especially not by hydroxyl radicals.

- US 6,793,903 (US '903) relates to oxidation of nitric oxide into nitrogen dioxide in a gas stream by high temperature decomposition of hydrogen peroxide to produce oxidative free radicals which are used instantly for the oxidation of nitric oxide (abstract). The heated surface have optionally a catalytic coating that may be composed of a variety of material such as glass, quartz, metal oxides ... and MgO (col.3, lines 27-35). A person skilled in the art would clearly understand from US '903 that the invention deals with the thermo-degradation of hydrogen peroxide into oxygen hydroxyls radicals, and that the catalysts, which are optional, have nothing to do with the observed effect. As taught in US '903 in col. 3, lines 35-38:

"The key element for the high temperature decomposition of hydrogen peroxide is contact with a heated surface, regardless of whether the surface has a catalytic coating or not."

Therefore, an average person skilled in the art would not have combined any of the catalytic materials cited in US '903 with CS '995 as for example glass or quartz are known to be inert in photochemical reactions.

4. The Applicant respectfully submits that none of the above publications or any combination thereof would have led a person skilled in the art to the present invention. The Applicant further submits, that the aim of the present invention is to generate hydroxyl radicals in aqueous medium containing hydrogen peroxide, magnesium oxide in suspension, and oxygen, wherein the radicals are not used instantly as in US '903 and will be rather conserved in solution for a further use. The surprising stability of the generated radicals enables the user of the invention to quantify them with salicylic acid as claimed in amended claim 1. The reaction environment of either CS '995 or US '903 obviously would not enable creating hydroxyl radicals, and reacting them with salicylic acid to provide higher absorbance in samples.

5. Claim 18 is rejected as being unpatentable over CS 274995 in combination with Parrish (US 6,793,903) and further in view of DD 51638.

Claim 18 has been canceled.

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Claims Rejection – 35 USC § 112

6. Claims 1-2, 4-6 and 8-18 are rejected as failing to comply with the written description requirement.

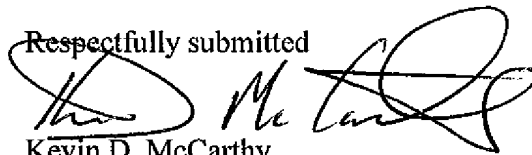
The amendment of claim 1, in the applicant's opinion, renders the Examiner's objection moot.

Conclusion

7. It is believed that after the above explanations and amendments, the amended claims define a novel and non obvious invention. It has been shown that CS '995 does not relate to radicals at all, that US '903 does not relate to the use of photocatalysts or UV at all, and that none of the two documents relates to stable radicals capable of being cumulated and measured in aqueous environment. Moreover, claim 1 has been amended by restricting the radicals to those quantifiable by reacting with salicylic acid.

As it is believed that all of the rejections set forth in the Office Action have been fully addressed, favorable reconsideration and allowance are respectfully requested.

Respectfully submitted



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